

Course: **Honors Advanced Math**
Text: **Advanced Mathematical Concepts: Precalculus with Applications**
 by Gordon, Yonker, Vannatta, and Crosswhite

Replacement Cost: \$65

This course fulfills the following Shrewsbury High School student expectations:

- *Fulfill individual academic potential.*
- *Develop critical and creative thinking skills to solve real world problems.*
- *Develop mathematical, scientific, and economic literacy.*
- *Develop competency in the use of information and technology.*
- *Formulate and express opinions supported by facts and data in effective presentations.*
- *Demonstrate effective reading, speaking, writing, and listening skills.*
- *Participate in collaborative and cooperative learning.*
- *Demonstrate a respect for individual abilities.*
- *Demonstrate self-discipline and personal responsibility for learning.*

Course Description:

This course prepares students for AP calculus and AP statistics as well as college mathematics and science courses. The focus of the course is on functions and their graphs. Topics covered include polynomial functions, systems of equations, trigonometry, inverse functions, polar functions, exponential and logarithmic functions, conic sections, and sequences and series.

Materials:

- ✓ Math Notebook
- ✓ Covered Textbook
- ✓ We ***strongly recommend*** the purchase of a TI-83 Graphing Calculator, as it is an integral part of this course. Some type of scientific calculator is **required**.
- ✓ Pencils and Erasers, because we all make mistakes.
- ✓ Student Planner
- ✓ Ruler

Course Expectations: Homework will be assigned on a regular basis and will be a component of the marking period grade. Students will also be assessed on their tests, quizzes, projects, notebooks, and individual/collaborative classwork. As communicating mathematical thinking will be stressed throughout the

course, assignments involving some type of written analysis/explanation will be collected and graded. Students are expected to be inside the classroom on time, to be prepared, and to take pride in their work. Students are also expected to be respectful of their teacher, peers, and classroom materials.

Semester Grade: Each quarter grade counts 40% and the semester exam counts 20% of the semester grade.

Extra Help: Available after school Monday – Thursday in the Math Lab (B202) or with the course teacher.